(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



542883

(43) International Publication Date 5 August 2004 (05.08.2004)

PCT

(10) International Publication Number WO 2004/065962 A1

(51) International Patent Classification⁷:

G01N 33/558

(21) International Application Number:

PCT/GB2004/000200

- (22) International Filing Date: 20 January 2004 (20.01.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0301225.9

20 January 2003 (20.01.2003) GB

- (71) Applicant (for all designated States except US): UNIVER-SITY OF SUNDERLAND [GB/GB]; Langham Tower, Ryhope Road, Sunderland SR2 7EE (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): ROWELL, Frederick, John [GB/GB]; Park Road South, Chester-le-Street, Durham DH3 3LS (GB).
- (74) Agent: HARRISON GODDARD FOOTE; 31 St. Saviourgate, York YO1 8NQ (GB).

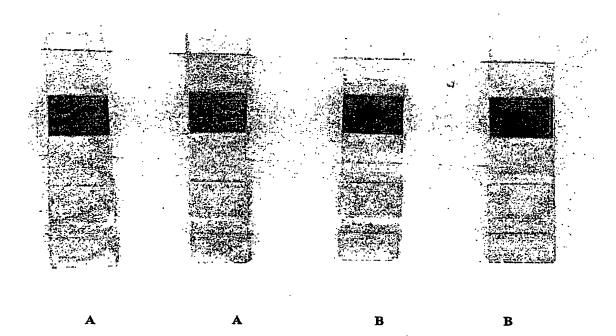
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: SURFACE LAYER AFFINITY-CHROMATOGRAPHY



(57) Abstract: There is described an affinity-chromatography assay system comprising with an immobilised component containing a bio-reagent and a flowable component containing a complimentary bio-reagent characterised in that the immobilised component is supported on a dip strip or planar surface and the flowable component is adapted to flow down the dip strip of high density. There is also described a method of conducting an affinity-chromatography assay which comprises the use of such an assay system.

 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N33/558 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 GO1N Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X EP 0 982 590 A (NITTO DENKO CORP) 1-4.6-19 1 March 2000 (2000-03-01) Υ the whole document 5 US 5 773 234 A (PRONOVOST ALLAN D ET AL) Y 30 June 1998 (1998-06-30) The whole document EP 1 143 247 A (MATSUSHITA ELECTRIC IND CO Α 1 - 19LTD) 10 October 2001 (2001-10-10) the whole document Α US 5 013 669 A (PETERS JR DONALD F ET AL) 1 - 197 May 1991 (1991-05-07) the whole document Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the International "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed in the art. "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the International search report 27 May 2004 30/06/2004 Name and mailing address of the ISA **Authorized officer** European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Angioni, C

" "NA I IUNAL SEARUFI REFURI

information on patent family members

bternational Application No
FCT/GB2004/000200

Patent document cited in search report				Patent family member(s)	Publication date
EP 0982590	A	01-03-2000	JP JP JP DE EP	2000019178 A 2000055919 A 2000121640 A 69912904 D1 0982590 A1	21-01-2000 25-02-2000 28-04-2000 24-12-2003 01-03-2000
US 5773234	A	30-06-1998	DE DE EP ES WO	69627668 D1 69627668 T2 0843815 A1 2198494 T3 9706436 A1	28-05-2003 25-03-2004 27-05-1998 01-02-2004 20-02-1997
EP 1143247	A	10-10-2001	JP EP CN WO TW	2001124772 A 1143247 A1 1327538 T 0131340 A1 494238 B	11-05-2001 10-10-2001 19-12-2001 03-05-2001 11-07-2002
US 5013669	Α	07-05-1991	NONE		